PAGES

017

020

MAIN-IPC

H01M008/04

H01M008/04

Print

## WEST

Profite

Generate Collection

L7: Entry 5 of 10

File: DWPI

Jan 31, 2003

DERWENT-ACC-NO: 2003-299536

DERWENT-WEEK: 200329

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: <u>Fuel cell</u> humidifying system for electric vehicle, has <u>bypass</u> that is provided to cathode exhaust gas passage to allow portion of exhaust gas to detour around fuel gas humidifier

INVENTOR: KATAGIRI, T; SHIMANUKI, H; SUZUKI, M

PATENT-ASSIGNEE:

ASSIGNEE CODE
HONDA MOTOR CO LTD HOND
HONDA GIKEN KOGYO KK HOND

PRIORITY-DATA: 2001JP-0213806 (July 13, 2001)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE

JP 2003031245 A January 31, 2003

US 20030012993 A1 January 16, 2003

APPLICATION-DATA:

PUB-NO APPL-DATE APPL-NO DESCRIPTOR

JP2003031245A July 13, 2001 2001JP-0213806 US20030012993A1 July 11, 2002 2002US-0193038

INT-CL (IPC): <u>H01 M 8/04</u>; <u>H01 M 8/10</u>

ABSTRACTED-PUB-NO: US20030012993A

BASIC-ABSTRACT:

NOVELTY - The exhaust gas flows from a cathode (1c) of a <u>fuel cell</u> (1) through a fuel gas <u>humidifier</u> (2) to an air <u>humidifier</u> (3). A <u>bypass</u> (7) is provided to the gas passage to allow a portion of exhaust gas to detour around the fuel gas humidifier.

USE - For electric vehicle.

ADVANTAGE - The <u>bypass</u> is provided to the cathode gas passage so as to avoid the fuel gas <u>humidifier</u> from regulating flow rate of exhaust gas, according to ratio of pressure loss in the gas, hence even when output of <u>fuel cell</u> rises, humidification level of fuel gas in fuel gas humidifier is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the general block diagram of  $\underline{\text{fuel cell}}$  humidifying system.

fuel gas <u>humidifier</u> 2

air humidifier 3

## bypass 7

CHOSEN-DRAWING: Dwg.1/12

 $\begin{array}{lll} \textbf{TITLE-TERMS:} & \underline{\textbf{FUEL}} & \underline{\textbf{CELL}} & \underline{\textbf{HUMIDIFY}} & \underline{\textbf{SYSTEM}} & \underline{\textbf{ELECTRIC}} & \underline{\textbf{VEHICLE}} & \underline{\textbf{CATHODE}} & \underline{\textbf{EXHAUST}} & \underline{\textbf{GAS}} & \underline{\textbf{PASSAGE}} \\ \underline{\textbf{ALLOW}} & \underline{\textbf{PORTION}} & \underline{\textbf{EXHAUST}} & \underline{\textbf{GAS}} & \underline{\textbf{DETOUR}} & \underline{\textbf{FUEL}} & \underline{\textbf{GAS}} & \underline{\textbf{HUMIDIFY}} \\ \end{array}$ 

DERWENT-CLASS: X16 X21

EPI-CODES: X16-C09; X21-A01F; X21-B01A;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2003-238299